

## Curriculum Vitae

### Educación

- 1997 Ph. D. *Sir Peter Mansfield* Magnetic Resonance Centre, Nottingham University, Nottingham NG7 2RD, Inglaterra.  
1989 Licenciatura en Ingeniería Física. Universidad Autónoma Metropolitana Atzacapotzalco, México, D.F.

### Publicaciones

#### Artículos arbitrados en revistas internacionales con factor de impacto

1. S. E. Solis-Najera, F. Vazquez, R. Hernandez, O. Marrufo, A. O. Rodriguez. Numerical Analysis of a Flexible Dual Loop Coil and its Experimental Validation for pre-Clinical Magnetic Resonance Imaging of Rodents at 7 T. *Measurement Science Review*, 16(6), 294-299, 2016. (DOI: 10.1515/msr-2016-0037)
2. R. Martin, J. F. Vazquez, O. Marrufo, S. E. Solis, A. Osorio, A. O. Rodriguez. SAR of a birdcage coil with variable number of rungs at 300 MHz. *Measurement* 82, 482-489, 2016. (<http://dx.doi.org/10.1016/j.measurement.2016.01.013>)
3. S. E. Solis, R. Martin, F. Vazquez, A. O. Rodriguez. Surface Coil with Reduced Specific Absorption Rate for Rat MRI at 7 Tesla. *Magnetic Resonance Materials in Physics, Biology and Medicine*, 28, 599-608, 2015. (DOI 10.1007/s10334-015-0501-8)
4. R. Martin, F. Vazquez, S.E. Solis-Najera, O. Marrufo, R. Godinez, A. O. Rodriguez. Functional Magnetic Resonance Study of Non-conventional Morphological Brains: malnourished rats. *Measurement Science Review*, 15(4), 176-183, 2015. 10.1515/msr-2015-0025
5. F. Díaz-Díaz, P. F de J. Cano-Barrita, B. J. Balcom, S. E. Solís-Nájera, A. O. Rodríguez. Embedded NMR sensor to monitor compressive strength development and pore size distribution in hydrating low and high water-to-cement ratio concrete. *Sensors*, 133, 15985, 2013. doi:10.3390/s131215985
6. F. Vazquez, R. Martin, O. Marrufo, A. O. Rodriguez. Travelling Wave Magnetic Resonance Imaging at 3 Tesla. *Journal of Applied Physics*, 114, 064906, 2013. dx.doi.org/10.1063/1.4817972
7. S. S. Hidalgo, S. E. Solis, K. Ocegueda, A. O. Rodriguez, Theoretical signal-to-noise ratio of a slotted surface coil for Magnetic Resonance Imaging with experimental validation. *Journal of Applied Physics*, 112, 034901, 2012. dx.doi.org/10.1063/1.4740222
8. J. Garcia, O. R. Marrufo, A.O. Rodriguez, E. Larose, P. Pibarot, L. Kadem, Cardiovascular Magnetic Resonance Evaluation of Aortic Stenosis Severity using Single Plane Measurement of Effective Orifice Area. *Journal of Cardiovascular Magnetic Resonance*, 14, 233, 2012. doi:10.1186/1532-429X-14-23
9. S. E. Solis, R. Wang, D. Tomasi, A. O. Rodriguez, A multi-slot surface coil for MRI of dual-rat imaging at 4 Tesla. *Physics in Medicine and Biology*, 56, 3551, 2011. dx.doi.org/10.1088/0031-9155/56/12/007
10. O. Marrufo, F. Vazquez, S. E. Solis, A. O. Rodriguez, Slotted cage resonator for high field magnetic resonance imaging of rodents. *Journal of Physics D: Applied Physics*, 44, 155503, 2011. dx.doi.org/10.1088/0022-3727/44/15/155503

#### Trabajos en congresos internacionales arbitrados en extenso

11. M. López, F. Vázquez, S. Solis-Nájera, A. O. Rodriguez. Numerical study of remote detection outside the magnet with travelling wave Magnetic Resonance Imaging at 3T. In *Journal of Physics: Conference Series*. Vol. 582, No. 1, p. 012037, 2015. doi: 10.1088/1742-6596/582/1/012037
12. J. Garcia, O. Marrufo, A. O. Rodriguez, P. Pibarot, L. Kadem. A New Index Measured by Cardiovascular Magnetic Resonance Imaging to Detect Mechanical Heart Valve Malfunction. *Proceedings of the 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology*, pp.1347-1350, Boston, EUA, Agosto 30-3 Septiembre, 2011. doi: 10.1109/IEMBS.2011.6090317
13. S. Solis, D. Tomasi, A. O. Rodríguez, Study of the magnetic interaction of a 4-coil array and copper shielding with a PET/MRI using the finite-element method. *Proceedings of the 32nd Annual International Conference of the IEEE Engineering in Medicine and Biology*, pp. 887-888, Buenos Aires, Argentina, Agosto 31-4 Septiembre, 2010. doi: 10.1109/IEMBS.2010.5627859

#### Trabajos en congresos internacionales arbitrados en resumen extendido

14. O. Marrufo, M. Perez Resentis, D. Lopez Lozada, M. Gonzalez, R. A. Martin Salas, Taboada, R. Martin, A. Rodriguez. Effects of mobile phone sounds in brain activity using fMRI. 21th Annual Meeting of the Organization for Human Brain Mapping. No. resumen 1675. Hawaii, June 14-18, 2015.
15. O. Marrufo, O. Belio, J. Taboada, R. Martin, A. O. Rodriguez. Right and left hand movement task compared to simultaneous task movements using fMRI. 20th Annual Meeting of the Organization for Human Brain Mapping. Hamburg, No. resumen 3991. Alemania, June 8-12, 2014.
16. O. Marrufo, C. Mejias, A. Pacheco, R. Carrillo, S. Vargas, J. Taboada, R. Martin, A. O. Rodriguez. Study of spastic paraparesis based on TBSS analysis using Diffusion Tensor Imaging at 3T. 20th Annual Meeting of the Organization for Human Brain Mapping. Hamburg. No. resumen. Alemania, June 8-12, 2014.
17. F. Vazquez, O. Marrufo, S. E Solis, A. O Rodriguez. Image Quality Improvement Via Phase Correction for Travelling Wave MRI at 3T. 23th Annual Meeting ISMRM, No. resumen 4811, p. 631, Milano, Italia, Mayo 10-16, 2014.
18. A. I. Osorio, S. E. Solis, R. Martin, F. Vázquez, A. O. Rodriguez. Investigation of shielded volume coil performance using dielectric cylinders with variable diameter at 7 Tesla. 30th Annual Meeting ESMRMB, No. resumen 622, p. 465, Toulouse, Francia, Octubre 3-5, 2013.
19. S. E. Solis, A. I. Osorio, R. Martin, F. Vázquez, A. O. Rodriguez. Numerical study of SAR reduction for a shielded volume coil via a dielectric material. 30th Annual Meeting ESMRMB, No. resumen 47, p. , Toulouse, Francia, Octubre 3-5, 2013.

20. F. Vazquez, S. E. Solis, R. Martin, A. O. Rodriguez. Comparison of two circularly-polarised coils for applications of travelling MRI at 3 T. 30<sup>th</sup> Annual Meeting ESMRMB, No. resumen 245, p. 191, Toulouse, Francia, Octubre 3-5, 2013.
21. F. Vázquez, A. O. Rodriguez. Feasibility numerical study of the travelling wave MRI at 3T. 30<sup>th</sup> Annual Meeting ISMRM, 21, No. resumen 4371, Utah, EUA, Abril 20-26, 2013.
22. F. Vazquez, O. Marrufo, A. O. Rodriguez. B1 mapping as a feasibility method for travelling wave MRI at 3 Tesla. 54<sup>th</sup> Conference ENC, No. resumen PR 354, Pacific Grove, CA, Abril 14-19, 2013.
23. R. Martin, O. Marrufo, F. Vazquez, R. Godinez, A. O. Rodriguez. Proton MRS phantom with N-Acetyl-L-aspartic acid for 1.5 T and 3 T applications. 54<sup>th</sup> Conference ENC, No. resumen PR 353, Pacific Grove, CA, Abril 14-19, 2013.
24. R. Martin, R. Godinez, A. O. Rodriguez. fMRI study of malnourished brain in rats. 29<sup>th</sup> Annual Meeting ESMRMB, No. resumen 450, p. 346, Lisboa, Portugal, Octubre 4-6, 2012.
25. F. Vazquez, A. O. Rodriguez. B1 improvement for travelling MRI using a parallel-plate waveguide at 3T. 29<sup>th</sup> Annual Meeting ESMRMB, No. resumen 625, p. 468, Lisboa, Portugal, Octubre 4-6, 2012.
26. F. Vazquez, A. O. Rodriguez. Numerical comparison of three surface coils for waveguide MRI at 3T. 29<sup>th</sup> Annual Meeting ESMRMB, No. resumen 439, p. 336, Lisboa, Portugal, Octubre 4-6, 2012.
27. O. Marrufo, F. Vazquez, R. Martin, A. O. Rodriguez. Double crossing volume coil for MRI of rodents at 7 Tesla. 29<sup>th</sup> Annual Meeting ESMRMB, No. resumen 675, p. 506, Lisboa, Portugal, Octubre 4-6, 2012.
28. S.E. Solis-Najera, R. Martin, L. Wags-Weinberg, B. de Rienzo, K. Simon-Arce, U. Coffen, A.O. Rodriguez, F. Pellicer. Functional reorganization of the primary somatosensory cortex after anesthetic block: an fMRI study. 29<sup>th</sup> Annual Meeting ESMRMB, No. resumen 35, p. 26, Lisboa, Portugal, Octubre 4-6, 2012.
29. R. G. Hernández-Salazar, S. Vargas-Cañas, S.S. Hidalgo-Tobón, O. Marrufo-Meléndez, S. E. Solis-Najera, A.O. Rodríguez-González, R.D. Delgado-Hernández. Combined IDEAL and Diffusion imaging to characterize Limb-girdle muscular dystrophy, 29<sup>th</sup> Annual Meeting ISMRM, No. resumen 20, p. 3263, Melbourne, Australia, Mayo 5-11, 2012.
30. F. Vazquez, O. Marrufo, R. Martin, A. O. Rodriguez. Signal-to-noise ratio improvement with a dielectric periodical array, 28<sup>th</sup> Annual Meeting ESMRMB, No. resumen 591, p. 145, Leipzig, Alemania, Octubre 6-8, 2011.
31. F. Vazquez, S. Solis-Najera, R. Martin, A. O. Rodriguez. RF coil decoupling with an electromagnetic band gap layer, 28<sup>th</sup> Annual Meeting ESMRMB, No. resumen 595, p. 148, Leipzig, Alemania, Octubre 6-8, 2011.
32. F. Vazquez, O. Marrufo, A. O. Rodriguez. Simple method for B1 mapping at 7 Tesla, 28<sup>th</sup> Annual Meeting ESMRMB, No. resumen 589, p. 143, Leipzig, Alemania, Octubre 6-8, 2011.
33. S. Solis-Najera, L. Magis-Weinberg, B. de Rienzo, K. Simon-Arce, U. Coffen, A. O. Rodriguez, F. Pellicer. BOLD fMRI study of functional reorganization of the primary somatosensory cortex in response to acute deafferentation with anesthetic block, 28<sup>th</sup> Annual Meeting ESMRMB, No. resumen 214, p. 153, Leipzig, Alemania, Octubre 6-8, 2011.
34. S. Solis-Najera, S. S. Hildago, A. O. Rodriguez. Magnetron coil array for cardiac MRI using SENSE encoding, 28<sup>th</sup> Annual Meeting ESMRMB, No. resumen 597, p. 149, Leipzig, Alemania, Octubre 6-8, 2011.
35. R. Martin, J. Ortega-Legaspi, S. Solis-Najera, F. Pellicer, A. O. Rodriguez. Pain matrix activation by denervation of the sciatic nerve: an fMRI study, 28<sup>th</sup> Annual Meeting ESMRMB, No. resumen 461, p. 57, Leipzig, Alemania, Octubre 6-8, 2011.
36. D. Flores, D. Diaz-Pontones, S. Hidalgo, S. Solis-Najera, A. O. Rodriguez. Susceptibility effect studies of pigeons with MRI, 28<sup>th</sup> Annual Meeting ESMRMB, No. resumen 549, p. 116, Leipzig, Alemania, Octubre 6-8, 2011.
37. D. Papoti, E. L. Vidoto, M. J. Martins, A. O. Rodriguez, A. Tannús. Transceiver double crossed saddle for rodents at 2T, The Meeting of the International Society for Magnetic Resonance in Medicine, p. 1819, Montreal, Canada, 7-13 Mayo 2011.
38. F. Vazquez, R. Martin, D. Flores, S. Solis, and A. O. Rodriguez, Numerical study of the waveguide magnetic field via the principal mode for MRI at 3 T, The Meeting of ISMRM, p. 1908, Montreal, Canada, 7-13 Mayo 2011.
39. F. Vazquez, R. Martin, S. Solis, and A. O. Rodriguez, Remote detection by MRI at 3T using a waveguide, The Meeting of ISMRM, p. 1879, Montreal, Canada, 7-13 Mayo 2011.
40. R. Martin, R. Godinez, A. O. Rodriguez, BOLD changes in somatosensory cortex of malnourished rats, Proceedings of The Joint Meeting of the International Society for Magnetic Resonance in Medicine and ESMRMB, p. 6484, Estocolmo, Suecia, 1-7 Mayo 2010.
41. F. Vazquez, R. Martin, O. Marrufo, A. O. Rodriguez, Waveguide Magnetic Resonance Imaging at 3 Tesla, Proceedings of The Joint Meeting of the International Society for Magnetic Resonance in Medicine and ESMRMB, p. 6484, Estocolmo, Suecia, 1-7 Mayo 2010.
42. S. E. Solis-Najera, A. O. Rodriguez-Gonzalez. Mini-slotted mouse MRI coil. 13<sup>th</sup> Annual Meeting ESMRMB, Antalya, Turquía, Septiembre 12-15, 2009.
43. S. Sanchez, S. S. Hidalgo, S. E. Solis, M. Rosas, and A. O. Rodriguez. Multi arm Archimedean coil for high field MRI. Proceedings of The 17<sup>th</sup> Annual Meeting of the International Society for Magnetic Resonance in Medicine, p. 4727, Honolulu, Hawaii, 18-24 Abril 2009.
44. J. F. Vazquez, O. R. Marrufo, S. E. Solis, S. S. Hidalgo, and A. O. Rodriguez. Magnetron volume coil for Magnetic Resonance Imaging of rodents. Proceedings of The 17<sup>th</sup> Annual Meeting of the International Society for Magnetic Resonance in Medicine, p. 4750, Honolulu, Hawaii, 18-24 Abril 2009.

45. O. R. Marrufo, S. E. Solis, S. S. Hidalgo, and A. O. Rodriguez. Slotted end-ring volume coil for small animal Magnetic Resonance Imaging at 7T. Proceedings of The 17<sup>th</sup> Annual Meeting of the International Society for Magnetic Resonance in Medicine, p. 4757, Honolulu, Hawaii, 18-24 April 2009.
46. R. Rojas, S. E. Solis, O. R. Marrufo, and A. O. Rodriguez. Numerical Determination of SNR using an Anatomic Pixel Rat Brain Model. Proceedings of The 17<sup>th</sup> Annual Meeting of the International Society for Magnetic Resonance in Medicine, p. 4782, Honolulu, Hawaii, 18-24 April 2009.
47. S. E. Solis, D. Tomasi, and A. O. Rodriguez, Study of the magnetic interaction of a 4-coil array and copper shielding with a PET/MRI using the finite-element method, Proceedings of The 16<sup>th</sup> Annual Meeting of the International Society for Magnetic Resonance in Medicine, p. 2987, Toronto, Canadá, 3-9 Mayo 2008.
48. R. Hernandez, A. O. Rodriguez, Simple model to study SENSE performance, Proceedings of The Joint Meeting of the International Society for Magnetic Resonance in Medicine and ESMRMB, p. 3243, Berlin, Alemania, 3 - 9 Mayo 2007.
49. S. Solis, R. Wang, D. Tomasi, A. O. Rodriguez, Slotted surface coil for magnetic resonance imaging at 4T, Proceedings of The 13<sup>th</sup> Annual Meeting of the International Society for Magnetic Resonance in Medicine, p. 2612, Seattle, WA, EUA, - Mayo 2006.
50. A. O. Rodriguez, Computed SNR of a phased-array of two PERES coils outperforms that of two circular coils, Proceedings of The 11<sup>th</sup> Annual Meeting of the International Society for Magnetic Resonance in Medicine, p. 1577, Kioto, Japón, 18-24 Mayo 2004.
51. A. O. Rodriguez, Computational comparison of two RF coil configurations for SENSE imaging, Proceedings of The 11<sup>th</sup> Annual Meeting of the International Society for Magnetic Resonance in Medicine, p. 1607, Kioto, Japón, 18-24 Mayo 2004.
52. S. Hidalgo, A.O. Rodríguez, R. Rojas, J. Sánchez, G. Reynoso, F. Barrios. Petal Resonator Surface Coil. Proceedings of The 9<sup>th</sup> Annual Meeting of International Society of Magnetic Resonance in Medicine, p. 1112, Glasgow, Scotland, 21-27 Abril 2001.
53. F. A. Barrios, A. O. Rodriguez, R. Rojas, J. Fernández, M. Alonso, G. Reynoso and J. Sánchez-Cortazar, <sup>1</sup>H-MRS and Diffusion-Weighted Imaging Correlated to Behavioral Studies in Huntington's Disease. Proceedings of The 8<sup>th</sup> Annual Meeting of International Society of Magnetic Resonance in Medicine, p. 1142, Denver, Colorado, 1-7 Abril 2000.
54. A. Rodriguez-Gonzalez and P. Mansfield, Flow encoded EPI visualised with the Daubechies 2D wavelet, Proceedings of The 8<sup>th</sup> Annual Meeting of International Society of Magnetic Resonance in Medicine, p. 1546, Denver, Colorado, 1-7 Abril 2000.
55. A. Rodriguez-Gonzalez, R. Bowtell, P. Mansfield, Symlet applied to enhance flow Echo-Planar Imaging, Med. Phys. 26, 1172 (PO-D-08), Junio 1999.
56. A. Rodriguez, R. Bowtell, P. Mansfield, Enhancement of HF-EPI velocity maps with the biorthogonal wavelet. Proceedings of Annual Meeting of The International Society of Magnetic Resonance in Medicine, p. 176, Philadelphia, Pennsylvania, 22-28 Mayo 1999.
57. A. Rodriguez, R. Bowtell, P. Mansfield, Enhancement of Velocity Maps with Fourier Filtering, 14<sup>th</sup> Annual Meeting ESMRMB, p. 156, Brussels, Septiembre 18-21, 1997.
58. A. Rodriguez, B. Issa, R. Bowtell, P. Mansfield, Determination of Blood Flow in Large Vessels and Heart by Half-Fourier EPI, MAG\*MA, IV, Supp., 254, 1996. p. 100. (13<sup>th</sup> Annual Meeting ESMRMB, Prague, Septiembre 12-15, 1996).
59. B. Issa, A. Rodriguez, P. A. Gowland, R. Bowtell, B. Worthington, P. Mansfield, J. L. Firth, Respiratory Modulation of CSF Dynamics Studied by EPI. Proceedings of The 11<sup>th</sup> Annual Meeting and Exhibition ISMRM, 3<sup>rd</sup> Scientific Meeting and Exhibition ESMRMB, p. 610, Agosto 19-25, 1995.

#### **Trabajos en congresos nacionales arbitrados**

60. M. López, F. Vázquez, S. Solís-Nájera, A. O. Rodriguez. Numerical study of remote detection outside the magnet with travelling wave magnetic resonance imaging at 3T. J. Phys.: Conf. Ser. 582, p. 012037, 2015.
61. S. Solis-Najera, A. O. Rodríguez. Magnetic Resonance Imaging of rodent spinal cord with an improved performance coil at 7 Tesla. AIP Conf Proc, Vol. 1626, pp. 213-216, 2014.
62. O. R. Marrufo, S. Solis-Najera, P. Pibarot, L. Kadem, Z. Kesharvarz-Motamed, A. O. Rodriguez, J. Garcia. Valve morphology effect in aortic coarctation flow using realistic silicon models and magnetic resonance imaging. AIP Conf Proc, Vol. 1626, pp. 86-90, 2014.
63. S. E. Solis-Najera, J. A. Neria-Pérez, L. Medina, R. Garipov, A. O. Rodríguez. Preliminary Study of Slow and Fast Ultrasonic Waves using MR Images of Trabecular Bone Phantom. AIP Conf Proc, Vol. , 1626 pp. 209-212, 2014.
64. A. Muhech, I. Tellez, M. Esteva, O. Marrufo, L. Jimenez, F. Vazquez, J. Taboada and A. O. Rodriguez. Magnetic Field Measurements of a Clinical MR Imager at 1.5 Tesla. AIP Conf Proc, Vol. 1494, pp. 112-114, 2012.
65. R. F. Nava-Juarez, R. Hernandez, A. O. Rodriguez. Determination of the Transversal Relaxation Times in MRI using the FID-Modulation Method. AIP Conf Proc, Vol. , 1494 pp. 100-102, 2012.
66. J. Garcia, S. S. Hidalgo, S. E. Solis, D. Vazquez, J. Nuñez, A. O. Rodríguez. Dedicated Phantom to Study Susceptibility Artefacts Caused by Depth Electrode in Magnetic Resonance Imaging. AIP Conf Proc, Vol. 1494, pp. 97-99, 2012.
67. F. Vazquez, O. Marrufo, R. Martin, and A. O. Rodriguez. MR Imaging with Remote Reception Using a Coil Array. AIP Conf Proc, Vol. 1494, pp. 94-96, 2012.
68. R. Jimenez, A. Benavides, D. Flores, S. S. Hidalgo, S. E. Solis, E. Uribe, A. O. Rodriguez. Magnetic Resonance Imaging Compatibility Test of a Cranial Prosthesis with Titanium Screws. AIP Conf Proc, Vol. 1494, pp. 47-49, 2012..
69. J. F. Vazquez and A. O. Rodríguez. Automatic Computation of Signal-to-Noise Ratio for Magnetic Resonances Images. AIP Conf Proc, Vol. 1494 , pp. 124-126, 2012.
70. S. E. Solis-Najera, D. Tomasi and A. O. Rodriguez. Variation of MRI Coil Uniformity Caused by microPET Shieldings. AIP Conf Proc, Vol. 1494, pp. 50-53, 2012.

71. O. R. Marrufo, J. Hernández, and A. O. Rodríguez, High field volume coil with unbalance current distribution for MRI applications of rodents. AIP Conf Proc, Vol. 1310, pp. 95-97, 2010.
72. M. E. Soto, P. Flores, O. Marrufo, S. S. Hidalgo, and A. O. Rodríguez, MRI Artifacts of a Metallic Stent Derived From a Human Aorta Specimen. AIP Conf Proc, Vol. 1310, pp. 138-141, 2010.
73. F. Vazquez, S. E. Solís, A. O. Rodríguez, Coil Array Design Inspired on the Kepler's Lenten Pretzel, AIP Conf Proc, Vol. 1032, pp. 155-160, 2008.
74. J. Hernandez, S. Solís, A. O. Rodríguez, Numerical Study of a Crossed Loop Coil Array for Magnetic Resonance Parallel Imaging, AIP Conf Proc, Vol. 1032, pp. 176-178, 2008.
75. F. Vazquez and A. O. Rodríguez, Finite-Element Electromagnetic Simulation of a Volume Coil with Slotted End-Rings, AIP Conf Proc, Vol. 1032, pp. 172-175, 2008.
76. S. E. Solís, J. Hernandez, D. Tomasi, A. O. Rodríguez, Two-Slotted Surface Coil Array for Magnetic Resonance Imaging at 4 Tesla, AIP Conf Proc, Vol. 1032, pp. 152-154, 2008.
77. S. E. Solís, D. Tomasi, A. O. Rodríguez, Mid-Range Coil Array for Magnetic Resonance Imaging of Small Animals, AIP Conf Proc, Vol. 1032, pp. 157-159, 2008.
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79. S. E. Solís, D. Tomasi, R. L. Wang, A. O. Rodríguez, 6-slot surface coil for magnetic resonance imaging at 4 Tesla. AIP Conf Proc, Vol. 854, pp. 75-77, 2006.
80. S. Solís, A. O. Rodríguez. Petal Resonator Surface Coil with Circular Envelope. AIP Conf Proc, Vol. 724, pp. 192-195, 2004.
81. M. López, A. O. Rodríguez, Planar Resonator Coil for H1 and P31 Magnetic Resonance Spectroscopy at 1.5 T and 3 T. Proceedings of the Seventh Mexican Symposium on Medical Physics, AIP Conf Proc, Vol. 724, pp. 128-131, 2004.
82. R. Hernández, A. O. Rodríguez, 1H MR Spectroscopy at 1.5 T & 3 T with clinical sequences. Proceedings of the Seventh Mexican Symposium on Medical Physics, AIP Conf Proc, Vol. 724, pp. 240-243, 2004.
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84. R. Hernández, A.O. Rodríguez, P. Salgado, F.A. Barrios, Ellipsoidal Coil for Magnetic Resonance Imaging. AIP Conf Proc, Vol. 682, pp. 205-210, 2003.
85. R. Hernandez-Flores, A. O. Rodríguez-Gonzalez, P. Salgado-Lujambio, F. A. Barrios-Alvarez. Concentric Loop Surface Coil. México-DF, México, AIP Conf Proc, Vol. 630, pp. 134-140, 2002.
86. R. Hernández Flores y A. O. Rodríguez González, Antena superficial de RF con arreglo de dos espiras concéntricas cuadrada y circular (COCUCI). Memorias del XLIV Congreso Nacional de Física, Número 3SA7, p. , Morelia, Michoacán, 2001.
87. A. Rodríguez, The Status of Magnetic Resonance Imaging in Mexico. AIP Conf Proc, Vol. 593, pp. 89-98, 2001.
88. A. O. Rodríguez, H<sup>1</sup>-MRSI applied to Study Huntington's Disease, México, AIP Conf Proc, Vol. 538, p. 168-173, 2000.
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90. Rodríguez-González, A., Bowtell, R., Mansfield, P. Comparison of Fourier Transform and Continuous Wavelet Transform to Study Echo-Planar Imaging Flow Maps, Memorias del 1<sup>er</sup> Congreso Ibero-Latinoamericano y del Caribe de Física Médica, pp. 131-133, Ciudad de México, México, Noviembre 25-28, 1998.
91. A. Rodríguez, B. Issa, P. Mansfield, Medición de flujo con imagenología RM, IV Memorias del Congreso de la División de Dinámica de Fluidos de la Sociedad Mexicana de Física, p. 132, San Luis Potosí, México, Octubre 26-30, 1998.
92. A. Rodríguez, R. Bowtell, P. Mansfield, Mapas de Flujo Sanguíneo como una Herramienta de Diagnóstico (Half-Fourier Echo Planar Imaging), Rev. Mex. Radiol., 52, S1, p. 227 (VI-83), 1998.
93. A. Rodríguez, R. Bowtell, P. Mansfield, Cuantificación de Flujo Sanguíneo en el Sistema Cardiovascular con Half-Fourier Echo Planar Imaging (HF-EPI). 1<sup>er</sup> Congreso Iberoamericano y Nacional de Ingeniería Física. Universidad Iberoamericana-Santa Fe, México, D. F., México, Enero 26-29, 1998.

#### **Dirección de trabajos de investigación**

5 tesis de doctorado, 11 tesis de maestría y 7 tesis de licenciatura concluidas. En proceso se encuentran 3 tesis de maestría.